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69713 7590 03/12/2009 OCCHIUTI ROHLICEK & TSAO, LLP 10 FAWCETT STREET CAMBRIDGE, MA 02138				
EXAMINER KASHNIKOW, ERIK				
ART UNIT		PAPER NUMBER		
1794				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

INFO@ORTPATENT.COM

### Office Action Summary

**Application No.**

10/553,147

**Applicant(s)**

SAUER, HARTMUT

**Examiner**

ERIK KASHNIKOV

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **1, 2, 3 and 4**. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 2 is objected to because of the following informalities: The word "item" appears after the claim, and appears to be a typo. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

Art Unit: 1794

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically there is no support in the specification for "non decorative structural part". Further Examiner points out that the cited phraseology clearly signifies a "negative" or "exclusionary" limitation for which the applicants have no support in the original disclosure. Negative limitations in a claim which do not appear in the specification as filed introduce new concepts and violate the description requirement of 35 USC 112, first paragraph, *Ex Parte Grasselli, Suresh, and Miller*, 231 USPQ 393, 394 (Bd. Pat. App. and Inter. 1983); 783 F. 2d 453.

The insertion of the above phraseology as described above positively excludes decorated structural parts , however, there is no support in the present specification for such exclusions. While the present specification is silent with respect to the use of decorations on the structural part, it is noted that as stated in MPEP 2173.05(i), the "mere absence of a positive recitation is not the basis for an exclusion."

5. Claims 1-24 are further rejected over the term "composite material that has..." given that while there is support for "composite material consisting of..." there does not appear to be support for "composite material that has..." which appears to recite open language with respect to the composite material, i.e. composite material is open to the

inclusion of components other than non-metallic substrate and metallic layer, for which there is no support in the present specification.

6. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While page 1, line 25 of the specification discloses that using such composite material is known with mobile telephones, there is no disclosure that the present invention itself uses the decorated product in a mobile phone.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-7, 11, 12, 13, 15, 21 and 24 rejected under 35 U.S.C. 102(b) as being anticipated by Metaplast Company INC, hereinafter Metaplast (GB 656,397).

9. In regards to claims 1, 4, 12, and 13 Metaplast teaches a process which coats the surface of a polymer substrate, including a polystyrene (column 1 lines 10-15) with a metal, wherein said process does not use external current. As the materials and the

process (i.e. blasting and rinsing) for depositing the metal is the same the adhesive strengths would therefore be inherent

10. In regards to claims 2, 6, 7, 11, 13, 15 and 24, since the materials are the same and it the process for depositing the metal is the same, the properties disclosed therein would be inherent.

11. In regards to claim 3 Examiner is treating it as a product by process claim, specifically regarding how the item is not made. It has been shown that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113 and *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966). Examiner also points out that the method taught by Metaplast follows the steps of blasting and rinsing to obtain the deposit (page 2 lines 45-48 and page 2 line 128 – page 3 line5).

12. In regards to claim 5 Metaplast teach that the metal onto the plastic layer and then further coating the metal layer by electroplating (page 3 lines 95-110).

13. In regards to claim 21 Metaplast teach that the article can be used for decorative purposes (page 3 lines 95-97).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Fadgen Jr et al. (US 3,607,352).

16. As stated above Metaplast teach a substrate coated with a metallic layer with out an electric current, however they are silent regarding the use of nickel as well as coating someplace besides the outer surface of the substrate.

17. In regards to claim 17 Fadgen Jr et al, who teach electrolessly plating non metallic surfaces (column 4 lines 10-11), teach nickel as a preferred metal used to coat the substrates (claim 20).One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Metaplast with that of Fadgen Jr et al. because the invention of Metaplast which offers a dependable product that is relatively inexpensive to make (page 1 lines 5-10) would benefit from the lack of skip plating formed from the invention of Fadgen Jr et al (column 7 lines 5-15).

18. Claims 8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Giltrow et al. (US 3,674,689).

19. As stated above Metaplast teach a substrate with metal coatings however they are silent regarding the substrate being a fiber reinforced substrate.

Art Unit: 1794

20. In regards to claims 8 and 22 Giltrow et al. teach carbon fiber reinforced substrates with diameters between 5-15  $\mu\text{m}$  (column 1 lines 42-55 and column 3 lines 42-50).

21. One of ordinary skill in the art at the time of the invention would be motivated to modify the substrate of Metaplast with the polymer reinforced substrate of Giltrow et al. because the polymer of Giltrow et al offers low wear rates (column 1 lines 15-17).

22. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Giltrow et al. (US 3,674,689) and Shaw et al. (US 4,643,940).

23. As stated above Metaplast teach a substrate with metal coatings however they are silent regarding the substrate being a glass fiber reinforced substrate.

24. In regards to claims 9 Shaw et al. teach that common fiber reinforcing materials are carbon and glass (column 1 lines 7-12).

25. In regards to claim 10 since the same materials are taught, this would be an intrinsic property.

26. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Metaplast and Gilbert et al, with that of Shaw et al. because Shaw et al. offer high flexural strength and stiffness (column 1 lines 20-25).



Art Unit: 1794

27. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Fadgen Jr et al. (US 3,607,352) and Lemelson (US 4,093,693).

28. As stated above Metaplast and Fadgen Jr teach a substrate with metal coatings however they are silent regarding embedding the metal with non metallic particles.

29. In regards to claim 18 and 19 Lemelson teach it is well known to add silicon carbide to metals to reinforce the matrix (column 1 lines 15-20 and column 9 line 58 column 10 line 5).

30. One of ordinary skill in the art at the time of the invention would be willing to modify the invention of Metaplast and Fadgen Jr with that of Lemelson because the invention of Lemelson offers reinforcement of the metal (column 1 lines 49-54).

31. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Lemelson (US 4,093,693) and Stenzel et al. (US 5,648,620).

32. As stated above Metaplast in view of Lemelson teach a substrate with metal coatings however they are silent regarding the friction reducing additive.

33. In regards to claim 20 Stenzel et al. teach that it is known to embed molybdenum sulphide in metal substances to increase friction reducing properties (claim 18).

34. One of ordinary skill in the art at the time of the invention would be motivated to use the Molybdenum of Stenzel et al. in the invention of Metaplast and Lemelson et al. because of the low friction and wear offered by Stenzel (column 2 lines 48-67).

35. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Kurfman (US 4,510,208).
36. As stated above Metaplast teach a substrate with metal coatings however they are silent regarding polypropylene and metal alloy layers.
37. In regards to claim 14 Kurfman teaches polypropylene and PTFE are useful substrates for coating with a metal layer or layers (column 6 lines 1-25).
38. In regards to claim 16 Kurfman teaches that metal alloy layers are desirable for coating on to polymer substrates (column 1 lines 48-55).
39. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Metaplast with that of Kurfman because the invention of Kurfman offers superior structural properties (column 5 lines 60-67).
40. Claims 1-7, 11, 12, 13, 15, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Fadgen Jr et al. (US 3,607,352).
41. As stated above Metaplast teach a substrate coated with a metallic layer with out an electric current, however they are silent regarding the use of nickel as well as coating someplace besides the outer surface of the substrate.
42. In regards to claim 5 it would be obvious to, as well as within the skill level of, one of ordinary skill in the art to have the non metallic substrate not be the surface of

the article, the position of the nonmetallic substrate would depend on the intended use of the article.

43. In regards to claim 17 Fadgen Jr et al, who teach electrolessly plating non metallic surfaces (column 4 lines 10-11), teach nickel as a preferred metal used to coat the substrates (claim 20). One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Metaplast with that of Fadgen Jr et al. because the invention of Metaplast which offers a dependable product that is relatively inexpensive to make (page 1 lines 5-10) would benefit from the lack of skip plating formed from the invention of Fadgen Jr et al (column 7 lines 5-15).

44. In regards to claims 1-6, 7 11-13, 15 and 21 since the materials for the composite layer are taught, i.e. an identical non metallic layer and metallic layer as presently claimed, as well as by a process as presently claimed all the properties would again be intrinsic.

45. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Metaplast (GB 656,397) in view of Tziovaras et al. (US 2003/0178739).

46. As stated above Metaplast teach a substrate coated with a metallic layer with out an electric current, however they are silent regarding the object being decorated is a cell phone.

47. In regards to claim 22 Tziovaras et al. teach a method for depositing metals onto polymers (paragraph 0002) and further teaches that this is done for decorating reasons

(paragraph 003). Tziovaras et al. further teach that casings for objects such as mobile phones is one embodiment of the invention (paragraph 0022).

48. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Metaplast with that of Tziovaras et al. because the invention of Tziovaras et al. offers good metallic gloss in addition to normal decorations to a wide variety of products (paragraph 0002).

### ***Response to Arguments***

49. Applicant's arguments, see arguments, filed 12/08/08, with respect to the 35 U.S.C. 101 and 112 2<sup>nd</sup> rejections have been fully considered and are persuasive. The 101 and 112 2<sup>nd</sup> rejection of the claims has been withdrawn.

50. Applicant's arguments, see arguments, filed 12/08/08, with respect to the objections of the specification and the drawings have been fully considered and are persuasive. The objections of the drawings and the specification have been withdrawn.

51. In response to Applicant's arguments that the article of Metaplast is pretreated by chemicals before it is coated by a metallic substrate, as well as Applicant's arguments that Metaplast teaches away from the present invention because of this chemical pretreatment it is pointed out that "nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as the preferred portion in assessing the patentability of claims." In re Nehrenberg, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). As disclosed in the office action, Metaplast discloses other

ways to prepare the substrate to be coated, including blasting and rinsing, which is not a chemical, but rather a physical process (Metaplast page 2 lines 38-48).

52. In regards to Applicant's arguments regarding Fadgen et al. Examiner points out that Fadgen et al. is being used to teach metallic articles not on the surface, as well as the use of nickel as the plating material, and is not being used to teach the coating method. Examiner notes that while Fadgen et al. do not disclose all the features of the present claimed invention, Fadgen et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references.

53. In regards to Applicant's arguments concerning Giltrow et al, Shaw et al.Lemelson, Stenzel et al. and Kurfman Examiner notes that while Giltrow et al, Shaw et al.Lemelson, Stenzel et al. and Kurfman do not disclose all the features of the present claimed invention, Giltrow et al, Shaw et al.Lemelson, Stenzel et al. and Kurfman are used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and

in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references

### ***Conclusion***

54. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is

Art Unit: 1794

(571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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